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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/846,091

DATE: 03/19/2002
TIME: 14:53:33

Input Set : N:\Crf3\RULE60\09846091.raw
Output Set: N:\CRF3\03192002\I846091.raw

1 <110> APPLICANT: HAYNES, Joel R.
2 MACKLIN, Michael D.
3 PAYNE, Lendon G.
4 <120> TITLE OF INVENTION: NUCLEIC ACID IMMUNIZATION
5 <130> FILE REFERENCE: APF40
7 <140> CURRENT APPLICATION NUMBER: 09/846,091
8 <141> CURRENT FILING DATE: 2001-04-30
10 <150> PRIOR APPLICATION NUMBER: US/09/561,951
11 <151> PRIOR FILING DATE: 2000-05-01
13 <160> NUMBER OF SEQ ID NOS: 11
14 <170> SOFTWARE: PatentIn Ver. 2.1
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 24
18 <212> TYPE: PRT
19 <213> ORGANISM: Influenza A virus
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23 Cys Arg Cys Asn Gly Ser Ser Asp
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27 <211> LENGTH: 24
28 <212> TYPE: PRT
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47 <211> LENGTH: 20
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49 <213> ORGANISM: Artificial Sequence
50 <220> FEATURE:

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51 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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58 <213> ORGANISM: Artificial Sequence
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67 <213> ORGANISM: Artificial Sequence
68 <220> FEATURE:
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75 <211> LENGTH: 28
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial Sequence
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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93 Arg
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96 <212> TYPE: DNA
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98 <220> FEATURE:
99 <221> NAME/KEY: CDS

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110 tgc aga tgc aac ggt tca agt gac ccg ctt gtt gct gcg agt atc 96
111 Cys Arg Cys Asn Gly Ser Ser Asp Pro Leu Val Val Ala Ala Ser Ile
112 20 25 30
113 att ggg atc ttg cac ttg ata ttg tgg att ttt gat cgt ctt ttt ttc 144
114 Ile Gly Ile Leu His Leu Ile Leu Trp Ile Phe Asp Arg Leu Phe Phe
115 35 40 45
116 aaa tgc atc tat cga ctc ttc aaa tac ggt ctg aaa aga ggg cct tct 192
117 Lys Cys Ile Tyr Arg Leu Phe Lys Tyr Gly Leu Lys Arg Gly Pro Ser
118 50 55 60
119 acg gaa gga gta cct gag tct atg agg gaa tat cga aag gaa cag 240
120 Thr Glu Gly Val Pro Glu Ser Met Arg Glu Glu Tyr Arg Lys Glu Gln
121 65 70 75 80
122 cag aat gct gtg gat gct gac gac agt cat ttt gtc agc ata gag ctg 288
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124 85 90 95
125 gag taa 294
126 Glu
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130 <212> TYPE: PRT
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136 20 25 30
137 Ile Gly Ile Leu His Leu Ile Leu Trp Ile Phe Asp Arg Leu Phe Phe
138 35 40 45
139 Lys Cys Ile Tyr Arg Leu Phe Lys Tyr Gly Leu Lys Arg Gly Pro Ser
140 50 55 60
141 Thr Glu Gly Val Pro Glu Ser Met Arg Glu Glu Tyr Arg Lys Glu Gln
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143 Gln Asn Ala Val Asp Ala Asp Asp Ser His Phe Val Ser Ile Glu Leu
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145 Glu
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148 <211> LENGTH: 4622
149 <212> TYPE: DNA
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153 tgaatcgccc catcatccag ccagaaaagtg agggagccac ggttcatgag agctttgttg 120
154 taggtggacc agttgtgtat tttgaacttt tgctttgccca cggAACGGTC tgcgttgtcg 180
155 ggaagatgcg tgatctgatc cttcaactca gcaaaaagtgc gatttattca acaaagccgc 240

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156 cgtccccgtca agtcagcgta atgctctgcc agtgttacaa ccaattaacc aattctgatt 300
 157 agaaaaaactc atcgagcatc aatgaaaact gcaatttttatt catatcagga ttatcaatac 360
 158 catatttttg aaaaagccgt ttctgtaatg aaggagaaaa ctcaccgagg cagttccata 420
 159 ggtatggcaag atccctgtat cggctctgcga ttccgactcg tccaacatca atacaaccta 480
 160 ttaatttccc ctcgtcaaaa ataaggatca caagtggaaa atcaccatga gtgacgactg 540
 161 aatccgggtga gaatggcaaa agcttatgca tttcttcca gacttggtaa acaggccagc 600
 162 cattacgctc gtcataaaaa tcaactcgcat caaccaaaacc gttattcatt cgtgattgcg 660
 163 cctgagcgag acgaaatacg cgatcgctgt taaaaggaca attacaaaca ggaatcgaat 720
 164 gcaaccggcg caggaacact gccagcgcat caacaatatt ttcacctgaa tcaggatatt 780
 165 cttctaatac ctggaatgct gtttcccg ggtatcgcat ggtgagtaac catgcatcat 840
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 167 gtcgtaccat ctcatactgta acatcattgg caacgctacc tttgccatgt ttcagaaaaca 960
 168 actctggcgc atcggcttc ccatacaatc gatagattgt cgcacctgat tgcccgacat 1020
 169 tatcgcgagc ccatttatac ccatataaat cagcatccat gttggaaattt aatcgcggcc 1080
 170 tcgagcaaga cgtttcccg tgaatatggc tcataacacc cttgttattt ctgtttatgt 1140
 171 aagcagacag ttttattgtt catgatgata tatttttattc ttgtgcaatg taacatcaga 1200
 172 gattttgaga cacaacgtgg ctttcccccc cccccccggca tgcctgcagg tcgcacataaa 1260
 173 tcaatattgg ctattggcca ttgcatacgt tgcataatata tcataatatg tacattata 1320
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 175 aatcaattac ggggtcatta gttcatagcc catatatggc gttccgcgtt acataactt 1440
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208 atctgttgtt tgccctccc ccgtgccttc cttgaccctg gaaggtgcc a cccactgt 3420
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229 tc
4622

VERIFICATION SUMMARY

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